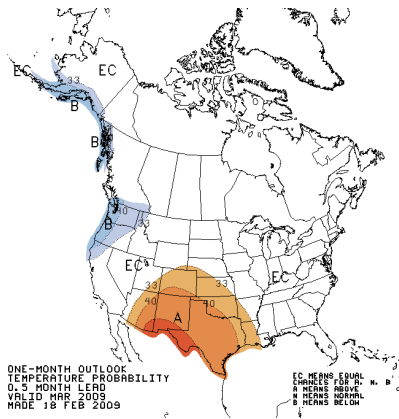


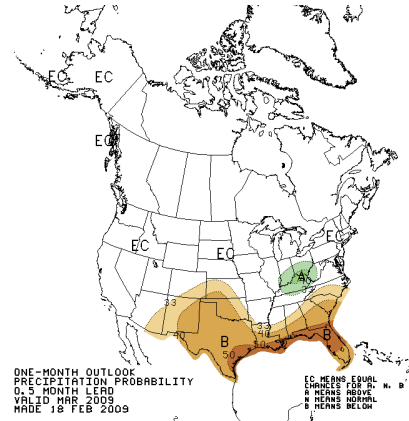
# March – May 2009 Temperature and Precipitation Outlooks

Below are the latest official probabilistic outlooks from the Climate Prediction Center (CPC) for March temperatures and precipitation, and the average for the March through May three month period.

## MARCH 2009 OUTLOOKS

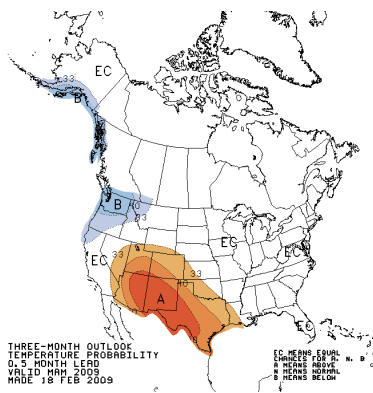


Temperature

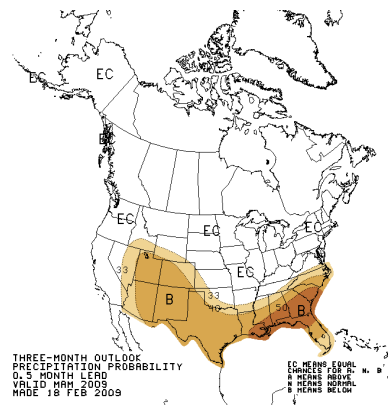


Precipitation

## MARCH through MAY 2009 OUTLOOKS



Temperature



Precipitation

In the above CPC outlooks, there are equal chances (EC) for above normal, normal and below normal temperatures and precipitation for South Dakota and the surrounding portions of Iowa, Minnesota, and Nebraska in the WFO FSD forecast area (33.3 percent chance of any category happening).

The shaded areas on these maps indicate where there is a higher probability of above normal or below normal values. For example, on the March temperature outlook, there is a 50 percent chance of seeing above normal temperatures in extreme southwestern Texas and southern New Mexico. There is still a 33 percent chance of normal temperatures, and a 17 percent chance of below normal temperatures in that region.

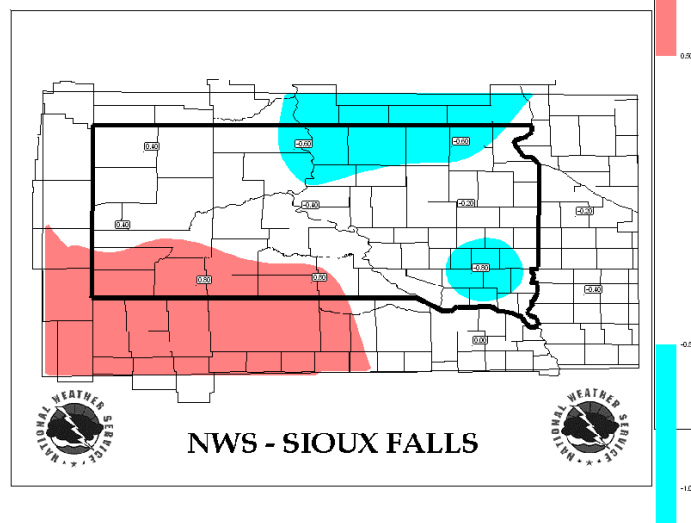
# Experimental WFO FSD Outlooks

The following images show the “best-guess” outlooks developed at WFO FSD. They are based on a combination of the output from several neural networks, comparing historical data from years with similar values and trends of multiple climate indices (analog), and looking at the correlations of several observed climate indices with future observed temperatures and precipitation based on historical data from over 55 years. Red is for above normal temperatures, blue is below normal temperatures, green is above normal precipitation, and brown is below normal precipitation.

## March 2009 Temperature Outlook

created 2/23/09

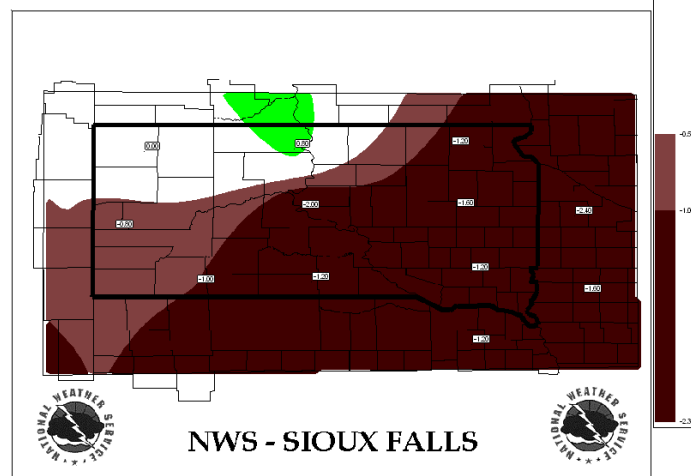
experimental WFO FSD product



## March 2009 Precipitation Outlook

created 2/23/09

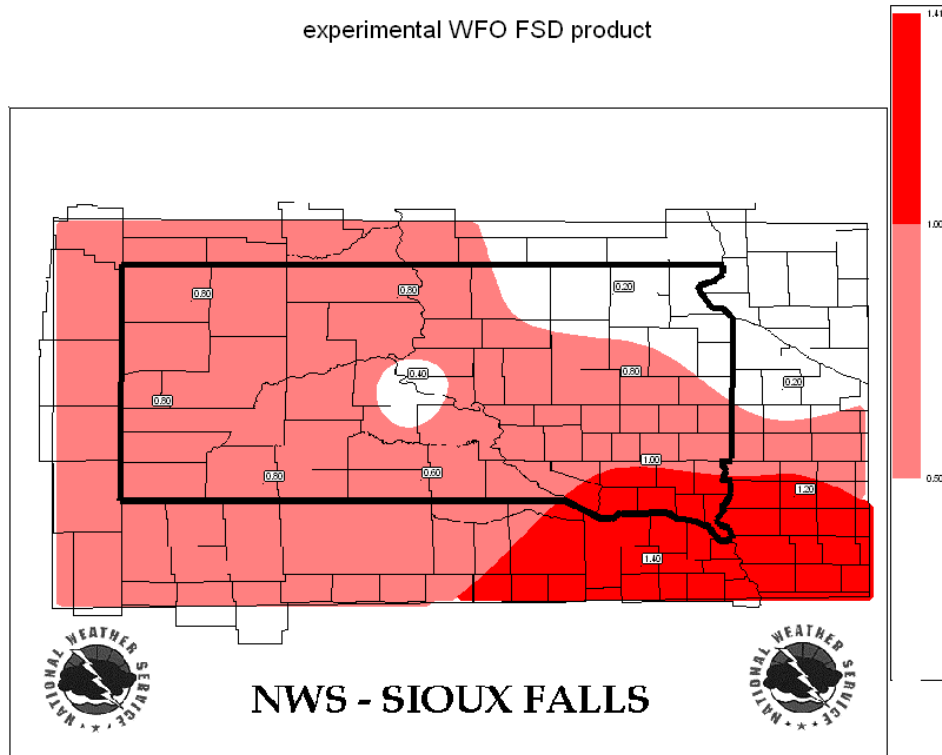
experimental WFO FSD product



# April 2009 Temperature Outlook

created 2/23/09

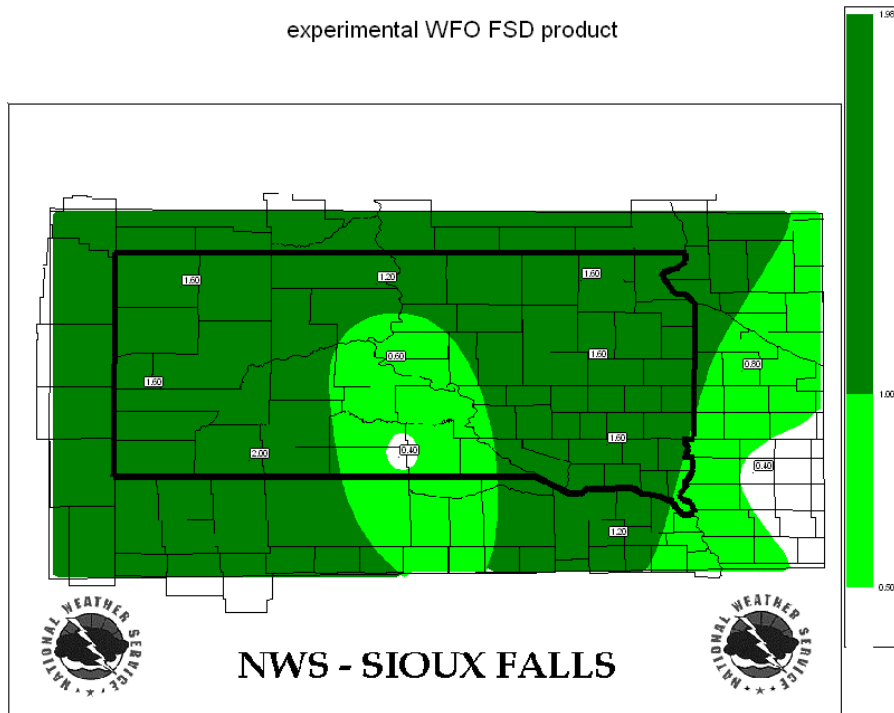
experimental WFO FSD product



# April 2009 Precipitation Outlook

created 2/23/09

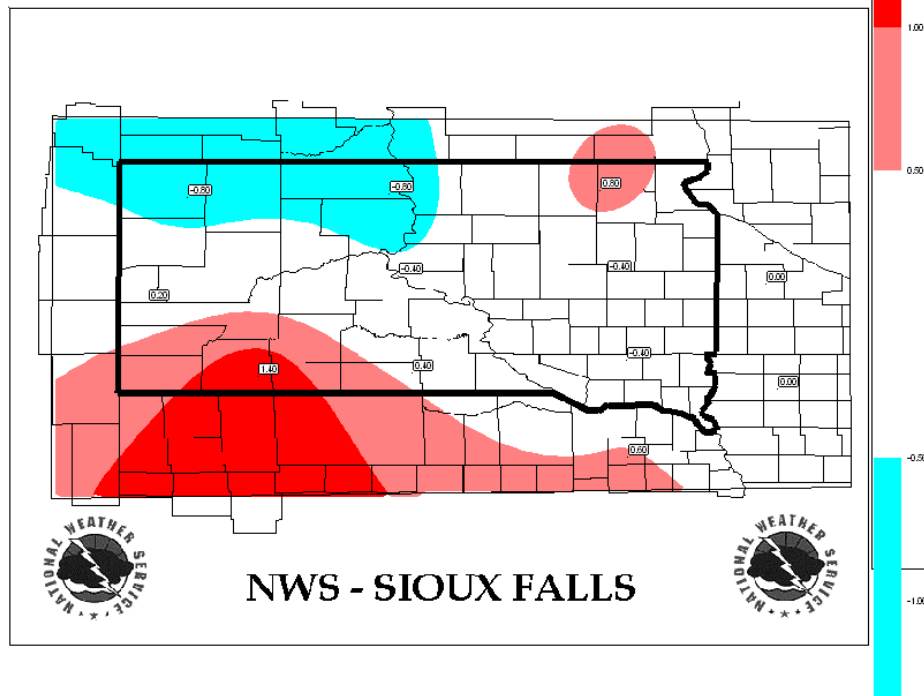
experimental WFO FSD product



# May 2009 Temperature Outlook

created 2/23/09

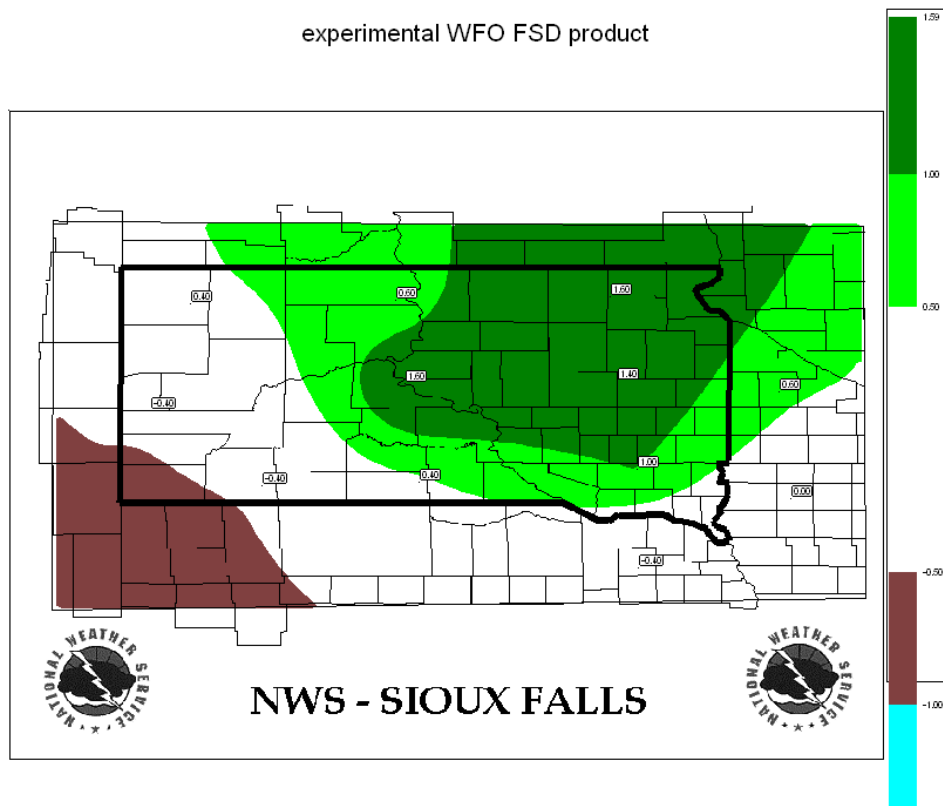
experimental WFO FSD product



# May 2009 Precipitation Outlook

created 2/23/09

experimental WFO FSD product



## Outlook Summary

### MARCH TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	30.2	NORMAL	100%
North-central SD	28.1	BELOW	40%
Northeast SD	27.4	BELOW	40%
Black Hills	30.9	NORMAL	80%
Southwest SD	33.7	ABOVE	40%
Central SD	31.3	NORMAL	80%
East-Central SD	29.4	NORMAL	60%
South-Central SD	33.2	ABOVE	40%
Southeast SD	32.7	BELOW	40%
Northwest IA	31.3	NORMAL	80%
Southwest MN	29.6	NORMAL	60%
Northeast NE	34.7	NORMAL	100%

## MARCH PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	0.84	<b>NORMAL</b>	60%
North-central SD	0.95	<b>ABOVE</b>	40%
Northeast SD	1.08	<b>BELOW</b>	60%
Black Hills	1.34	<b>BELOW</b>	40%
Southwest SD	0.99	<b>BELOW</b>	40%
Central SD	1.09	<b>BELOW</b>	60%
East-Central SD	1.31	<b>BELOW</b>	80%
South-Central SD	1.38	<b>BELOW</b>	60%
Southeast SD	1.56	<b>BELOW</b>	40%
Northwest IA	1.84	<b>BELOW</b>	60%
Southwest MN	1.63	<b>BELOW</b>	80%
Northeast NE	1.84	<b>BELOW</b>	40%

## APRIL TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	43.2	ABOVE	20%
North-central SD	43.1	ABOVE	20%
Northeast SD	43.0	NORMAL	80%
Black Hills	40.3	ABOVE	20%
Southwest SD	45.3	ABOVE	20%
Central SD	45.3	NORMAL	80%
East-Central SD	44.5	ABOVE	20%
South-Central SD	46.1	ABOVE	40%
Southeast SD	47.2	ABOVE	40%
Northwest IA	46.1	ABOVE	40%
Southwest MN	44.8	NORMAL	100%
Northeast NE	48.6	ABOVE	60%

## APRIL PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	1.62	ABOVE	60%
North-central SD	1.87	ABOVE	40%
Northeast SD	2.08	ABOVE	60%
Black Hills	2.33	ABOVE	60%
Southwest SD	1.85	ABOVE	60%
Central SD	1.95	ABOVE	40%
East-Central SD	2.20	ABOVE	60%
South-Central SD	2.34	NORMAL	60%
Southeast SD	2.48	ABOVE	40%
Northwest IA	2.71	NORMAL	60%
Southwest MN	2.57	ABOVE	40%
Northeast NE	2.57	ABOVE	40%



## MAY TEMPERATURE OUTLOOKS

Climate Division	Normal Value (Deg F)	Outlook	Confidence
Northwest SD	54.8	BELOW	40%
North-central SD	55.8	BELOW	40%
Northeast SD	56.1	ABOVE	40%
Black Hills	50.8	NORMAL	60%
Southwest SD	56.5	ABOVE	60%
Central SD	57.4	NORMAL	40%
East-Central SD	57.0	NORMAL	40%
South-Central SD	57.7	NORMAL	80%
Southeast SD	59.3	NORMAL	40%
Northwest IA	58.9	NORMAL	60%
Southwest MN	57.8	NORMAL	60%
Northeast NE	60.2	ABOVE	40%

## MAY PRECIPITATION OUTLOOKS

Climate Division	Normal Value (IN)	Outlook	Confidence
Northwest SD	2.72	NORMAL	60%
North-central SD	2.74	ABOVE	40%
Northeast SD	2.82	ABOVE	40%
Black Hills	3.66	NORMAL	40%
Southwest SD	2.98	NORMAL	40%
Central SD	2.76	ABOVE	40%
East-Central SD	3.02	ABOVE	40%
South-Central SD	3.32	NORMAL	60%
Southeast SD	3.44	ABOVE	40%
Northwest IA	3.67	NORMAL	40%
Southwest MN	3.35	ABOVE	40%
Northeast NE	3.96	NORMAL	40%

*DISCLAIMER: WFO FSD is developing local 1 to 3 month outlooks of temperature and precipitation. These outlooks are experimental and still being tested and developed. They are being provided to give more details and a more deterministic outlook for South Dakota and the portions of Minnesota, Iowa, and Nebraska in the FSD forecast area. They are not intended to compete with or replace the official NOAA outlooks issued by the Climate Prediction Center (CPC), which are probabilistic. For more details on how these outlooks are prepared, or if you have any questions concerning these outlooks, please feel free to contact the WFO FSD Climate Services Focal Point [Mike Gillispie](#).*